

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A system for the detection of the presence of objects in a blind angle of an automobile vehicle, installed in an automobile vehicle and comprising:

first means of detection of distortion of the earth's magnetic field caused by the entry of an object, containing at least one ferromagnetic material piece, in a zone of said blind angle covered by said first means of detection that supplies electric signals, on the basis of the ~~value-strength~~ of said magnetic field, to an electronic circuit with a ~~digitising~~digitizing stage for said signals,

a second stage that analyses the signals obtained after said ~~digitising~~digitizing;

a first stage that generates variable output signals based on the basis of the results of said analysis; and

second means of detection for any possible magnetic distortion generated from ~~the a~~ trajectory of said automobile vehicle, associated with said electronic circuit and intended to ~~neutralise the~~neutralize an influence of said possible magnetic distortion on the detection of said first means.

2. (Previously Presented) A detection system in accordance with claim 1, further comprising third means of detection of any possible magnetic distortion deriving from the vehicle's inclination and/or vibration, associated with the electronic circuit.
3. (Currently Amended) A detection system in accordance with claim 1, further comprising fourth means of detection of any possible magnetic distortion deriving from magnetic fields generated within the vehicle, associated with the ~~cited~~ electronic circuit.
4. (Previously Presented) A detection system in accordance with claim 1, wherein said second means of detection comprises at least one accelerometer.
5. (Previously Presented) A detection system in accordance with claim 1, wherein said second means of detection comprises at least means of data acquisition employing a turning sensing pulse system located at least on one of the vehicle's wheels.

6. (Currently Amended) A detection system in accordance with claim 1, wherein said second means of detection ~~comprise~~ comprises at least one turning detection device located on the vehicle's steering wheel.
7. (Previously Presented) A detection system in accordance with claim 2, wherein said second means of detection and said third means of detection comprises at least one 2-axis accelerometer.
8. (Previously Presented) A detection system in accordance with claim 3, wherein said fourth means of detection comprises at least two magnetic field sensors located inside the vehicle, connected in common mode, distanced from each other and positioned in such a manner that they generate very similar output signals when one of said magnetic fields is produced inside the vehicle.
9. (Previously Presented) A detection system in accordance with claim 1, wherein said first means of detection comprises at least one magnetic sensor housed inside a rear-view mirror assembly outside the vehicle.
10. (Previously Presented) A detection system in accordance with claim 8, wherein said sensors are magnetoresistive.
11. (Previously Presented) A detection system in accordance with claim 8, wherein said sensors are selected from the group consisting of flux-gate magnetometers, hall type sensors and magneto-inductive sensors.
12. (Currently Amended) A method of detection of the presence of objects in a blind angle of an automobile vehicle ~~of the type that is based on the use of first means of detection of distortion in the earth's magnetic field caused by the entry of an object, which contains at least one ferromagnetic material, in a zone of said blind angle covered by said first means of detection and an electronic system, comprising:~~
  - carrying out the detection of the entry of said object into said zone of said blind angle,
  - obtaining signals that represent said detection,
  - processing and ~~analysing~~ analyzing of said signals,
  - generating of some variable output signals ~~based on the basis of the results of said analysis,~~

carrying out, by means of said electronic system and at least second means of detection, the detection of possible magnetic distortion deriving from ~~the a~~ trajectory of said automobile vehicle, and

processing and ~~analysing~~analyzing of signals that are representative of said possible magnetic distortion deriving from the automobile vehicle's trajectory, in order to ~~neutralise~~neutralize its effect on the detection obtained by the first means of detection.

13. (Currently Amended) A method of detection in accordance with claim 12, further comprising carrying out, using said electronic system and at least third means of detection of possible magnetic distortion deriving from the inclination and/or vibration of the automobile vehicle, the processing and analysis of signals representative of said possible magnetic distortion deriving from the inclination and/or vibration of the automobile vehicle in order to ~~neutralise~~neutralize their effect on the detection obtained by the first means of detection.

14. (Currently Amended) A method of detection in accordance with claim 13, further comprising carrying out, by means of said electronic system and a fourth means of detection of possible magnetic distortions produced by magnetic fields generated inside the vehicle itself, the processing and analysis of signals representative of said possible magnetic distortions produced by magnetic fields generated inside the vehicle itself in order to ~~neutralise~~neutralize its effect on the detection obtained by the first means of detection.

15. (Currently Amended) A method of detection in accordance with claim 14, wherein for each of the possible trajectories adopted by the vehicle and/or of the possible positions of inclination and/or vibration ~~suffered by the same of the vehicle~~ and/or of the magnetic fields generated inside the vehicle itself, after said processing and analysis of the signals representative of the possible magnetic distortions, it comprises storing, by means of the electronic system, of distortion values of the earth's magnetic field, with these values forming a table that relates trajectory, inclination and/or vibration or magnetic fields generated inside the vehicle with ~~the a~~ corresponding distortion value of the magnetic field ~~due to the specific circumstances~~.

16. (Currently Amended) A method of detection in accordance with claim 15, wherein at least one of said values, representative of the vehicle's circumstances at any ~~moment~~point in time, with said circumstances being known through the second, third and fourth means of

detection, is operated with the distortion value of the earth's magnetic field obtained by the first means of detection for this same ~~instant~~point in time.

17. (Previously Presented) A detection system in accordance with claim 9, wherein said sensors are magnetoresistive.

18. (Previously Presented) A detection system in accordance with claim 9, wherein said sensors are selected from the group consisting of flux-gate magnetometers, hall type sensors and magneto-inductive sensors.